Future Disasters Activities

Science Advisory Committee Meeting

26 – 28 August, 2014

National Space Science and Technology Center, Huntsville, AL







Review

- SPoRT has increased involvement in disaster response:
 - Initial work leveraged SPoRT core capabilities and support to provide imagery to partnering WFOs following April 27 and other events.
 - SPoRT also used core capabilities to support numerous requests of the Applied Sciences program, including Superstorm Sandy, Super Typhoon Haiyan, and other events.
- Core capabilities and partnerships were leveraged to win an Applied Sciences: Disasters Feasibility Study and Decisions award







Future Work

- SPoRT will further develop web mapping service capabilities to expand the reach and applicability of disaster-related imagery.
- Research efforts focus on improved ability to detect damage and automate output products:
 - Tornado / hail damage tracks via NDVI and LST
 - Use of commercial imagery for urban area support
 - Use of the DNB and supporting demographics and infrastructure data to add value to satellite imagery
- Over the past several months, WMS knowledge and capabilities have grown, along with partnerships in USGS to aid in acquiring post-disaster imagery.





Opportunities for Growth

- SPoRT continues to seek opportunities to leverage core capabilities via ROSES awards:
 - Applied Sciences: Disasters (ongoing, FY14-FY17)
 - Current NASA/NOAA partnership in the DAT activity
 - Rapid Response and Novel Research in Earth Science (in review)
 - Proposed a comprehensive WMS-based data dissemination of NASA Applied Science Disasters imagery and DNB efforts
 - Suomi NPP Science Team and Applications (not selected)
 - Sought support for continued DNB efforts
 - SPoRT will continue to develop skill in this area, sustaining partnerships with key end users
 - Advanced Information Systems Technology (in review)
 - Combined cloud computing / WRF modeling capabilities and imagery for decision support
- External to the NASA ROSES award process, our visibility in the Disasters area will provide additional funding opportunities
 - Possible external collaborations with other agencies and organizations involved in disaster response activities (e.g. USGS, WMO, and others)



